Remarks

1. Summary of Office Action

In the office action mailed May 27, 2005, the Examiner rejected claims 1-32, 34-48, and 51-53 under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,061,346 (Nordman). In addition, the Examiner objected to claims 33, 49, and 50 as depending from rejected base claims but indicated that they would be allowable if rewritten in independent form.

2. Status of the Claims

Applicant has amended claims 1, 4, 29, 41, 47, 49 to correct minor typographical errors where the word "add" had been omitted before the last clause of each of these claims. Presently pending in this application are claims 1-53, of which claims 1, 13, 29, 41, 47, 51, and 53 are independent and the remainder are dependent.

3. Response to § 102 Rejections

Under M.P.E.P. § 2131, a prior art reference anticipates a patent claim only if the reference teaches (expressly or inherently) each and every element set forth in the claim, in as complete detail as the elements are recited in the claim. Applicant submits that the anticipation rejection of claims 1-32, 34-48, and 51-53 is improper, because Nordman does not teach each and every element of any of these claims.

a. Claims 1-12

Independent claim 1 recites a method that includes receiving a request to establish a circuit-data session between a user terminal and a specified destination, and responsively (i) setting up a packet-data session between the user terminal and a translation node, (ii) setting up a circuit-data session between the translation node and the specified destination, and (iii) bridging

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the packet-data session with the circuit-data session. Nordman does not teach this combination of elements.

Nordman teaches establishing a packet-data session between a wireless host and a remote IP network. In particular, the wireless host first signals to a radio access network (RAN) node such as an SGSN or MSC, and, after authenticating the wireless host, the RAN node then establishes a secure IP tunnel via a backbone network with a remote IP network, and the remote IP network allocates an IP address to the wireless host. As a result, the wireless host can then function as an IP node on the remote IP network, via the secure tunnel between the RAN node and the remote IP network. As such, the arrangement in Nordman does not involve the functions of claim 1.

In rejecting claim 1, the Examiner seems to have suggested that Nordman's disclosure of an SGSN receiving an attach request from a wireless host constitutes setting up a packet-data session between a user terminal and a translation node. However, Applicant understands from Nordman that the attachment procedure via the SGSN is done to establish wireless packet-data connectivity via the backbone network to the remote IP network. As such, it appears that the packet-switched connection to which Nordman refers is the connection that SGSN provides over the backbone network and with the remote IP network, rather than a packet-data session between the wireless host and the SGSN. By way of analogy, in the arrangement described in Applicant's invention, the SGSN would constitute a PDSN, which merely provides connectivity between a RAN and a packet-switched network, so that a wireless terminal can engage in packet-data communications with an entity on the packet-switched network.

Furthermore, if Nordman's SGSN is the translation node of Applicant's claim 1 as the Examiner has suggested, then Nordman additionally fails to disclose the invention of claim 1,

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because Nordman does not teach establishing a circuit-switched connection between the SGSN and a specified destination. In fact, although the Examiner concluded that Nordman anticipated claim 1, the Examiner did not mention in the office how or why the Examiner believes Nordman teaches the element of "setting up a circuit-data session between the translation node and the specified destination." The Examiner only noted that Nordman teaches an MSC/VLR providing connectivity with the circuit-switched PSTN and also being connected via a BSC with the SGSN. However, those teachings of Nordman do not amount to setting up a circuit-data session between Nordman's SGSN (as alleged "translation node") and a specified destination.

It follows from foregoing that Nordman also fails to teach the bridging function as recited in claim 1, namely, bridging the packet-data session (between the user terminal and the translation node) with the circuit-data session (between the translation node and the specified destination). In rejecting claim 1, the Examiner appears to have suggested that Nordman's disclosure of a connection between the SGSN and the MSC/VLR (either via a BSC, or via a backbone network) constitutes the claimed bridging function. Yet the fact that Nordman teaches connections between the SGSN and the MSC/VLR does not amount to any bridging function, let alone the specific bridging function recited in claim 1.

Because Nordman does not teach the combination of elements recited in claim 1, Nordman fails to anticipate claim 1. Furthermore, since claims 2-12 depend from claim 1 and incorporate all of the limitations of claim 1, Nordman similarly fails to anticipate claims 2-12.

Applicant does not acquiesce in the assertions that the Examiner made more specifically with respect to claims 2-12, but Applicant submits that those assertions are moot in view of the fact that Nordman fails to anticipate the invention of independent claim 1.

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b. Claims 13-28

Independent claim 13 recites a method that includes (i) receiving into a user terminal a request to establish a dial-up data session between the user terminal and a dial-up data server, the dial-up data session defining data to be communicated between the user terminal and the dial-up data server, (ii) packetizing outgoing data at the user terminal, to produce outgoing packetized data, (iii) transmitting the outgoing packetized data from the user terminal to a translation node, (iv) placing a circuit-switched call from the translation node to the dial-up data server, (v) translating the outgoing packetized data into an outgoing dial-up data stream at the translation node, and (vi) in the call, sending the outgoing dial-up data stream from the translation node to the dial-up data server. Nordman does not teach this combination of elements.

At a minimum, for instance, Nordman does not teach placing a circuit-switched call from a translation node to a dial-up data server and/or having the translation node translate outgoing packetized data provided by a wireless host into an outgoing dial-up data stream to the dial-up data server as recited in claim 13. The closest teaching in Nordman to this function is Nordman's teaching of a wireless host establishing a dial-up data session with a remote IP network server via an MSC. However, in that scenario, the wireless host (rather than the MSC) is the entity that places the call to the remote server via the PSTN (with the MSC functioning as the serving PSTN switch). Nordman does not teach a translation node placing a circuit-switched call to a dial-up data server.

Furthermore, in rejecting claim 13, the Examiner appears to have construed Nordman's SGSN as being the "translation node" of claim 13. However, Nordman does not teach the function of placing a circuit-switched call from the SGSN (as alleged "translation node") to a dial-up data server. Thus, based on the Examiner's interpretation of Nordman, Nordman does

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not teach having a translation node place a circuit-switched call to a dial-up data server as recited in claim 13.

Because Nordman does not teach the combination of elements recited in claim 13, Nordman fails to anticipate claim 13. Furthermore, since claims 14-28 depend from claim 13 and incorporate all of the limitations of claim 13, Nordman similarly fails to anticipate claims 14-28.

Applicant does not acquiesce in the assertions that the Examiner made more specifically with respect to claims 14-28, but Applicant submits that those assertions are moot in view of the fact that Nordman fails to anticipate the invention of independent claim 13.

c. Claims 29-32 and 34-40

Independent claim 29 recites a method that involves receiving a user request to establish a communication session from a user terminal to a specified circuit-terminated destination and, in response to the request, (i) setting up a first session from the user terminal to an intermediate packet-terminated destination via a communication path including the access link, so that the first session is carried over the access link at the first service level, (ii) setting up a second session from the intermediate packet-terminated destination to the specified circuit-terminated destination, and (iii) bridging the first session with the second session to produce an end-to-end session from the user terminal to the specified destination.

Applicant's specification coins the claim-terms "packet-terminated destination" and "circuit-terminated destination." In particular, at page 6, lines 14-19, the specification defines a "packet-terminated destination" to be an entity that sends and/or receives packets (e.g., IP packets or ATM cells) and a "circuit-terminated destination" to be an entity that sends and/or receives channelized data streams (such as TDM signals for instance), whether or not framed.

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Appropriately applying those definitions, claim 29 requires that that the first session be set up from the user terminal to an intermediate entity that sends and/or receives packets, with the first session being carried over an access link at a first service level. Further, claim 29 requires that the second session be set up between that intermediate entity and a specified entity that sends and/or receives channelized data streams. And claim 29 then requires that the first and second sessions be bridged together to produce an end-to-end session fro the user terminal to the specified entity. Nordman does not teach this combination of elements.

At best, Nordman teaches that a wireless host can establish either a packet-data session with a remote IP network *or* a dial-up data session with a dial-up data server. However, Nordman does not teach setting up a first session from a user terminal to a packet-terminated destination, setting up a second session from the packet-terminated destination to a circuit-terminated destination, and bridging those sessions together.

Furthermore, in rejecting claim 29, the Examiner suggested that Nordman's SGSN constitutes the "intermediate packet-terminated destination" of claim 29. If that is so, then Nordman fails to teach the invention of claim 29, because Nordman does not teach establishing a second session from the SGSN to a circuit-terminated destination. Rather, Nordman's SGSN establishes a secure packet data session with the remote IP network; thus, the remote IP network (namely, the GGSN) functions as a packet-terminated destination, not a circuit-terminated destination.

Because Nordman does not teach the combination of elements recited in claim 29, Nordman fails to anticipate claim 29. Furthermore, since claims 30-32 and 34-40 depend from claim 29 and incorporate all of the limitations of claim 29, Nordman similarly fails to anticipate claims 30-32 and 34-40.

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Applicant does not acquiesce in the assertions that the Examiner made more specifically with respect to claims 30-32 and 34-40, but Applicant submits that those assertions are moot in view of the fact that Nordman fails to anticipate the invention of independent claim 29.

d. Claims 41-46

Independent claim 41 recites a method that involves receiving a user request to establish a circuit-data session between a user terminal and a specified destination and, responsive to the user request, (i) establishing a packet-data session between the user terminal and an intermediate entity, (ii) establishing a circuit-data session between the intermediate entity and the specified destination, and (iii) bridging the packet-data session with the circuit-data session, so as to establish an end-to-end session between the user terminal and the specified destination.

The arguments set forth above with respect to claim 1 apply equally with respect to claim 41, with the term "intermediate entity" of claim 41 replacing the term "translation node" of claim 1. Therefore, for the same reasons that Nordman does not anticipate claim 1, Nordman does not anticipate claim 41. Furthermore, since claims 42-46 depend from claim 41 and incorporate all of the limitations of claim 41, Nordman similarly fails to anticipate claims 42-46.

Applicant does not acquiesce in the assertions that the Examiner made more specifically with respect to claims 42-46, but Applicant submits that those assertions are moot in view of the fact that Nordman fails to anticipate the invention of independent claim 41.

e. Claims 47-48

Independent claim 47 recites a system comprising a user terminal including a first processor, a first data storage mechanism, a first communication interface for communicating over an air interface, a first user-input means for receiving a user request to establish a dial-up data session with a specified circuit-terminated destination, and a first set of instructions stored

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in the first data storage mechanism and executable by the first processor, in response to the user request, (i) to send a session-setup message via the air interface requesting establishment of a packet-data session and (ii) once the packet-data session is established, to send packets that include dial-up data as payload and that include a predetermined identifier associated with a dial-up data session. Nordman does not teach this combination of elements.

At a minimum, for instance, Nordman does not teach a user terminal receiving a user request to establish a dial-up data session with a circuit-terminated destination and, instead, responsively establishing a packet-data session to carry packets that contain dial-up data.

At best, Nordman's wireless host can establish a dial-up data session via the MSC and PSTN to a dial-up data server. However, that would be a conventional *circuit-switched telephone call* from the wireless host to the dial-up data server, with data flowing within the circuit-switched call. Claim 47, in contrast, recites that a user terminal responds to a request for a dial-up data session by establishing *wireless packet-data session* and then sending data in packets of that data session.

Because Nordman does not teach the combination of elements recited in claim 47, Nordman fails to anticipate claim 47.

Dependent claim 48, in turn, adds to the system of claim 47 a translation node that includes, among other elements, a set of instructions stored in data storage and executable by a processor (i) to translate the packets into outgoing circuit-data and (ii) to provide the outgoing circuit-data to the third communication interface for transmission of the outgoing circuit-data to the specified circuit-terminated destination.

Because claim 48 depends from claim 47 and incorporates all of the limitations of claim 47, Nordman similarly fails to anticipate claim 48. Furthermore, in rejecting claim 48, the

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Examiner appears to have construed Nordman's SGSN as being the "translation node" of claim 48. However, Nordman does not teach the function of the SGSN translating packets from the user terminal into outgoing circuit-data and transmitting the outgoing circuit-data to a circuit-terminated destination as recited in claim 48. Consequently, for this additional reason, Nordman fails to anticipate claim 48.

f. Claims 51-52

Independent claim 51 recites a system that includes (i) a processor, (ii) data storage, (iii) a first communications interface for communicating packet-data, the first communications interface receiving packets representing dial-up data from a mobile station and providing the packets to the processor, (iv) a second communications interface for communicating circuit-data, the second communications interface receiving a dial-up data stream from the processor and sending the dial-up data stream to a dial-up server, and (v) instructions stored in the data storage and executable by the processor to translate the packets into the dial-up data stream. Nordman does not teach this combination of elements.

In rejecting claim 51, the Examiner appears to have construed Nordman's SGSN as being the "first communication interface" of claim 51, and the Examiner appears to have construed Nordman's SGSN or MSC/VLR as being the "second communication interface" of claim 51 and as performing the "translating" function of claim 51. However, Nordman does not teach such translation.

If Nordman's SGSN is the entity of claim 51 that receives dial-up packet-data from a mobile station, Nordman fails to anticipate claim 51, because Nordman does not teach the SGSN or another entity translating those received packets into circuit-data. Furthermore, if Nordman's MSC is the entity of claim 51 that receives dial-up packet-data from a mobile station, Nordman

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also fails to anticipate claim 51, because Nordman does not teach the MSC or another entity translating such received packets into circuit-data.

Because Nordman does not teach the combination of elements recited in claim 51, Nordman fails to anticipate claim 51. Furthermore, since claim 52 depends from claim 51 and incorporates all of the limitations of claim 51, Nordman similarly fails to anticipate claim 52.

Applicant does not acquiesce in the assertions that the Examiner made more specifically with respect to claim 52, but Applicant submits that those assertions are moot in view of the fact that Nordman fails to anticipate the invention of independent claim 51.

g. Claim 53

Independent claim 53 recites a system for providing a dial-up data session between a user terminal and a remote access server, the system comprising (i) means for establishing a packet-data session between the user terminal and a translation node, via a communication path including an air interface, (ii) means for establishing a circuit-data session between the translation node and the remote access server, and (iii) means for bridging the packet-data session and the circuit-data session. Nordman does not teach this combination of elements.

In rejecting claim 53, the Examiner appears to have construed Nordman's SGSN as the "translation node" of claim 53. However, Nordman does not teach the function of establishing a circuit-data session between the SGSN (as alleged "translation node") and a remote access server. Thus, based on the Examiner's interpretation of Nordman, Nordman does not teach the function of establishing a circuit-data session between the translation node and the remote access server as recited in claim 53. Furthermore, it follows that Nordman does not teach the function of bridging the packet-data session with such a circuit-data session as recited in claim 53.

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Because Nordman does not teach the combination of elements recited in claim 53, Nordman fails to anticipate claim 53.

4. Response to Claim Objections

As noted above, the Examiner objected to claims 33, 49, and 50 as being dependent on a rejected base claim but indicated that the claims would be allowable if rewritten in independent form. Applicant thanks the Examiner for indicating that the subject matter of claims 33, 49, and 50 would be allowable. However, for the reasons set forth above, Applicant submits that the claims from which claims 33, 49, and 50 depend are not anticipated by Nordman. Consequently, Applicant submits that claims 33, 49, and 50 are in condition for allowance as is.

5. Drawings

The Examiner objected to the drawings on grounds that the drawings are informal. Applicant submits herewith formal drawings. Applicant has also amended the typographical errors in the specification that the Examiner noted, for consistency with the drawings.

6. Conclusion

In view of the foregoing, Applicant submits that all of the pending claims 1-53 are in condition for allowance. Therefore, Applicant respectfully requests favorable reconsideration and notice to that effect. Should the Examiner wish to discuss this application with the undersigned, the Examiner is welcome to call the undersigned at 312-913-2141.

Respectfully submitted,
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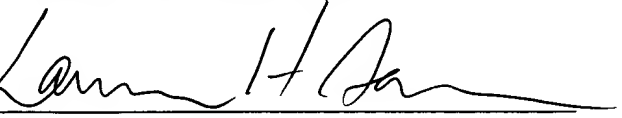
By: 

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